

Notice of Allowability

Application No.

10/747,943

Examiner

Mike Qi

Applicant(s)

KIM, HYE-YOUNG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment of April.24, 2006.
2. ☒ The allowed claim(s) is/are 1,3-15,19-28 and 30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material.
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Esther H. Chong on May 10, 2006.

The application has been amended as follows:

The claims 16-18 and 29 have been canceled.

The claims 13-15 are dependent on the independent claim 1. The claim 26 is dependent on claim 25, and the claim 25 is dependent on claim 20, and the claim 20 is dependent on claim 19. The claims 27-28 are dependent on claim 20, and the claim 20 is dependent on claim 19. According to the allowable independent claims 1 and 19, the claims 13-15 and 25-28 are allowed.

Allowable Subject Matter

1. Claims 1, 3-15, 19-28 and 30 allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art of record neither anticipated nor rendered obvious that a liquid crystal display comprises various elements as claimed, more specifically, as the following features:

an organic insulating layer (passivation layer) between the first inorganic insulating layer (gate insulating layer) and the second insulating layer, the organic insulating layer below the second insulating layer; and the seal pattern between the second inorganic insulating layer and the inner surface of the second (upper) substrate, and the seal pattern contacting a part of the second inorganic insulating layer; and forming an inorganic insulating layer on the passivation layer, and the seal pattern contacting the inorganic insulating layer and the second (upper) substrate so as to improve the adhesion and as shown in Fig.9E [claims 1 and 19];

the first inorganic insulating layer (gate insulating layer) has at least one groove through the second inorganic insulating layer and the organic layer (passivation layer); and forming at least one groove through at least part of the gate insulating layer, the passivation layer and at least part of the inorganic insulating layer so as to improve the adhesion and as shown in Fig.9E [claims 5 and 21].

The reference Tanaka teaches that using organic insulating layer (passivation layer) on an inorganic insulating layer (gate insulating layer), and the seal pattern contacting the inorganic insulating layer (gate insulating layer). But the prior art of

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record does not teach the first inorganic insulating layer (gate insulating layer) having groove through the first inorganic insulating layer (gate insulating layer), organic insulating layer (passivation layer) and the second inorganic insulating layer so as to improve the adhesive as claimed and as shown in Fig.9E.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (571) 272-2299. The examiner can normally be reached on M-T 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Qi
May 10, 2006


ANDREW SCHECHTER
PRIMARY EXAMINER